U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Assistant Secretary for Housing-Federal Housing Commissioner

TO: DIRECTORS, HOUSING DIVISION
DIRECTORS, MULTIFAMILY DIVISION
DIRECTORS, SINGLE FAMILY DIVISION

Series and Series Number:

(Supersedes issue dated October 28, 1994)

MATERIALS RELEASE NO.

1263a

ISSUE DATE: Ta

January 14, 1998

REVIEW DATE: January 14, 2001

SUBJECT: 1. Product

James Hardie Exterior Siding and Soffit and Interior Wall Backerboards and Lining Board

2. Name and Address of Manufacturer

James Hardie Building Products, Inc. 10901 Elm Avenue Fontana, CA 92337

Data on the nonstandard product, described herein have been reviewed by the Department of Housing and Urban Development (HUD) and determination has been made that it is considered suitable from a technical standpoint for the use indicated herein. This Release does not purport to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.

This Materials Release cannot be used as an indication of endorsement, or approval by HUD of the described product, and any statement or representation, however made, indicating such approval or endorsement by HUD is unauthorized. See Code 13, U.S.C. 709.

Any reproduction of this Release must be in its entirety.

<u>USE</u>: Exterior wall sheathing, cladding and soffit and interior wall backerboard and lining board.

### **DESCRIPTION:**

James Hardie Building Products, Inc. structural exterior wall and claddings, and interior wall backerboard and lining board consist of cellulose fiber-reinforced (non-asbestos) cement flat sheets that are not compressed. The products covered by this report include: Hardiplank®, Hardipanel® (Hardiflex), Harditex®, and Hardisoffit® exterior claddings, and Hardibacker® (square edge) and Hardiboard® (tapered edge) interior wall backerboard and lining board (Sample label in Figure 1).

### REQUIREMENTS:

The structural exterior wall sheathing panels and cladding shall be in compliance with the American Society for Testing & Materials (ASTM) C 1186 "Standard Specification for Flat Non-Asbestos Fiber-Cement Sheets" (Type A). The structural interior wall backerboard and lining boards shall be in compliance with American Society for Testing & Materials

(ASTM) C 1288 "Standard Specification for Discrete Non-Asbestos Fiber-Cement Interior Substrate Sheets". The structural exterior wall sheathing panels and claddings and the interior wall backerboard and lining boards shall be installed in accordance with Table 1.

### **CERTIFICATION:**

James Hardie Building Products, Inc. certifies that the structural exterior wall panels and claddings, and interior wall backerboards are produced in conformance with a validation program at Intertek Testing Services, Inc. Each panel certified as conforming to this MR shall be labeled with the following information:

- 1. The Intertek Testing Services validation mark.
- 2. The manufacturer's name.
- 3. The manufacturers conformance to this MR.

#### **WARRANTY:**

James Hardie Building Products, Inc., warrants the exterior wall panels and claddings, and interior wall backerboards for 20 years, against manufacturing defects.

Figure 1

# HARDIPLANK LAP SIDING

SIDING WITH EXTREME DURABILITY(TM)
AND EXTRAORDINARY LOOKS(TM)

- \* Application Directly to Braced Framing
- \* Noncombustible, Immune to Water/Insect Damage
- \* Smooth or Woodgrain and Colonial or Beaded
- Paintable
- \* Lightweight and Easy to Cut

Complies with HUD MR 1263a-Q.C.Agency- Intertek Testing Service

Beaded Cedarmill(tm) Woodgrain Lap Siding 8-1/4" Primed

WARNING - AVOID BREATHING SILICA DUST Product contains SILICA. Exposure to respirable silica dust ten cause Silicatis, a potentially disabling lung disasses, and is known to the State of California to cause lung cancer. When drilling, cutting, or abrading product during installation or handling; (1) work out of goors where feasible, otherwise use mechanical ventilabilin. (2) West dust wask or, if dust may exceed FEL, use NICSHMESHA approved respirator, (3) Warn other in sea. For further information, reserve to Material Safety Data Shact or consult employer.



James Hardie Building Products, Inc.



1-800-9-HARDIE

Table 1 ALLOWABLE LOADS FOR STRUCTURAL EXTERIOR WALL PANELS, AND CLADDINGS, AND INTERIOR WALL BACKERBOARDS(1)

Product Type	Product Thickness	Fastener Type (3,6)	Fastener Spacing	Frame Type	Stud Spacing	Shear Value (plf)	Uttimate Load (psf)	Allowable Wind Zones
<del></del>	(inches)		(inches)		(inches)	E-72	E-930	(Part 3280)
Hardiflex(2) Hardiflex(2)	5/16	0.091" shank x 0.225" HD x 1.5" long ring shank nail	4" edge 8" field	2 x lumber(5)	16	200	90	IONLY
Hardipanel(2) Hardiflex(2)	5/16	0.113" shank x 0.266" HD x 2" long nail	6" edge 12" field	2 x lumber(4)	16	157	<b>6</b> 9	IONLY
Hardipenel(2) Hardiflex(2)	5/16	0.113" shank x 0.266" HD x 2" long nail	6" edge 12" field	2 x lumber(4) using 3/8" thick sheathing nailed 6" edge / 6" field	16		W.X	I, II and III
Hardipanel(2) Hardiflex(2)	5/16	0.113" shank x 0.266" HD x 2" long nail	6" edge 6" field	2 x lumber(4)	16	200	149	i, il and lli
Hardipanel(2) Hardiflex(2)	5/16	0.113" shank x 0.266" HD x 2" long nail	4" edge 4" field	2 x tumber(4)	16	233	236	E, IL and EII
Harditex(2)	5/16	0.121° shenk x 0.375° HD x 1- 1/2° long roofing nail	6" edge 6" field	2 x lumber(4)	16	200	144	i, li and ili
Harditex(2)	5/16	0.121" shank x 0.375" HD x 1- 1/2" long roofing nail	4" edge 12" field	2 x lumber(4)	16	280	144	1, il end lii
Harditex(2)	5/16	0.121" shank x 0.375" HD x 1- 1/2" long roofing nail	3" edge 12" field	2 x lumber(4) w/48-in. mid- height block	16	340	144	I, 11 and 111
Hardipanel(2) Hardiflex(2)	5/16	0.113" shank x 0.266" HD x 2" long nail	5" edge 12" field	2 x lumber(4)	24	146	59	IONLY
Hardipanel(2) Hardiflex(2)	5/16	0.113" shank x 0.266" HD x 2" long nail	6" edge 12" field	2 x lumber(4) using 3/8" thick sheathing nailed 6" edge / 6" field	24		100	l, il mod lit
Hardipenel(2) Hardiflex(2)	5/16	0.113" shank x 0.266" HD x 2" long nail	6" sdge 6" field	2 x tumber(4)	24	153	94	IONLY
Hardipanel(2) Hardiflex(2)	5/16	0.113" shank x 0.266" HD x 2" tong nali	4" edge 4" field	2 x lumber(4)	24	212	143	i, il and ill
Harditex(2)	5/16	0.121" shank x 0.375" HD x 1- 1/2" long roofing neil	6" edge 6" field	2 x lumber(4)	24	160	84	IONLY
Hardipanel(2) Hardiflex(2)	5/16	Min. No. 8-16 x 0.323° HD x 1° long Hi-Lo S or S- 12 ribbed bugle screws	6" edge 6" field	Min, No. 20ga. x 3-5/8" x 1-3/8" metal C-Stud	16	160	170	t, it and iti
Hardiplank 12"	5/16	0.113" shank x 0.266" HD x 2" long neit	through everlap (face-nailed)	2 x lumber(4)	16 & 24		75	IONLY
Hardiplank ≤9-1/2*	5/16	0.113" shank x 0.266" HD x 2" long nail	through overlap (face-nailed)	2 x kmber(4)	16		199	I, II and III
Hardiplank <9-1/2*	5/16	0.089" shank x 0.221" HD x 2" long siding nail	Errough overlap (face-nailed)	2 x lumber(5)	16		106	IONLY
Hardiplank ≤9-1/2*	5/16	0.089" shank x 0.221" HD x 2" long siding nail	through overlap (face-nailed)	2 x lumber(4) using 3/8" thick sheathing nailed 6" edge / 6" field	16	N.	V)	i, 11 and 111

The maximum height-to-length ratio for construction in this table is 2:1.

(3) (4) (5) (6)

All penel edges must be supported by framing. Hardipenel, Hardiflex, and Harditex are also permitted to be applied with the long dimension perpendicular to the All panel edges must be supported by traming. Hardipanel, Hardinex, and Hardinex are also permitted to be a framing.

All fasteners shall be corrosion-resistant.

Values are for species of wood having a specific gravity of 0.42 or greater.

Values are for species of wood having a specific gravity of 0.36 or greater.

Allowable tolerance for shark deameter, head diameter, and length of nail fasteners is as specified in Federal Specification FF-N-10SB, Section 3.4.2.

6° ground clearence required for Manufactured Housing Skirting.

# Table 1 (cont'd) ALLOWABLE LOADS FOR STRUCTURAL EXTERIOR WALL PANELS, AND CLADDINGS, AND INTERIOR WALL BACKERBOARDS(1)

Product Type	Product Thickness (inches)	Fastener Type (3,6)	Fastener Spacing (inches)	Frame Type	Stud Spacing (inches)	Shear Value (ntf) ASTM E-72	Ultimate Load (psf) ASTM E-350	Allowable Wind Zones (Part 3280)
Hardiplank <9-1/2*	5/16	0.091" shank x 0.225" HD x 1- 1/2" long siding nail	12" o.c. through overlap (face-nailed)	to 7/16" thick APA rated OSB sheathing	16		72	LONEA
Hardiplank ≤12°	<b>5/</b> 16	Min. No. 8-18 x 0.323" HD x 1 <sup>5</sup> / <sub>8</sub> " long Hi-Lo S or S- 12 ribbed bugle screws	through overlap (face-nailed)	Min. No. 16ga. x 3-5/8" x 1-3/8" metal C-Stud	16 & 24	on Newson	92	IONLY
Hardiplank ≤9-1/2*	5/16	0.121" shank x 0.375" HD x 1- 3/4" long roofing nail	through top edge of plank (blind-nailed)	2 x lumber(5)	16	***	146	I and II ONLY
Hardiplank 8-1/4" 8"	5/16	0.093" shank x 0.222 HD x 2" long siding nail	through top edge of plank (blind-nailed)	2 x lumber(5)	16		82	IONLY
Hardiplank <u>&lt;</u> 7-1/2*	5/16	0.093" shank x 0.222 HD x 2" long siding naif	through lop edge of plank (blind-nailed)	2 x lumber(5)	16		92	IONLY
Hardiplank <9-1/2*	5/16	Min. No. 8-18 x 0.375" HD x 1"/4" long Hi-Lo S or S- 12 ribbed Phillips waterhead screws	through top edge of plank (blind-nailed)	Min. No. 20ga. x 3-5/8" x 1-3/8" metal C-Stud	16		169	I, II, and III
Hardisoffit(2)	1/4	0.069" shank x 0.25" HD x 1-1/2" long nail	8" edge 8" field	2 x lumber(4)	16	165	. 88	IONLY
Hardisoffit(2)	1/4	0.089" shank x 0.25" HD x 1-1/2" long nail	6" edge 8" field	2 x lumber(4)	24	120	64	I ONLY
Hardisoffit(2)	1/4	0.113° shank x 0.266° HD x 2° long nail:	6" edge 6" field	2 x lumber(4)	16	190	140	IONLY
Hardisoffit(2) EAVES ONLY	5/16	0.113" shank x 0.266" HD x 2" long nail	6" edge 6" field	2 x lumber(4)	16	200	149	1, II, and Iti
Hardisoffit(2) EAVES ONLY	5/16	0,113" shank x 0,266" HD x 2" long nail	6" edge 6" field	2 x lumber(4)	24	153	94	IONLY
Hardisoffi(2) EAVES ONLY	5/16	0.113" shank x 0.266" HD x 2" long nail	5" edge 6" field	2 x lumber(4) using 3/8" thick sheathing nailed 6" edge / 6" field	24	72	<b>X</b>	IONLY
Hardiboard(2)	1/4	0.086" shenk x 1- 3/8" long gypeum board nail	6" edge 6" field	2 x lumber(4)	16 & 24	140	33.	,123
Hardiboard(2)	1/4	Mirt. No. 8-18 x 0,323" HD x 1" long Hi-Lo S or S- 12 ribbed ribbed bugle screws	6" edge 6" field	Min. No. 20ga. x 3-5/8" x 1-3/8" metal C-Stud	16 & 24	125		
Hardibacker(2)	1/4	0.121" shank x 0.375" HD x 1- 1/4" long roofing neil	6" edge 6" field	2 x lumber(4)	16 & 24	180	Ų.	745
Hardibacker(2)	7/16	0.121" shank x 0.375" HD x 1- 3/4" long roofing nail	6" edge 6" field	2 x lumber(4)	16	280	***	***
Hardibacker(2) Hardiboard(2)	7/16	Min. No. 6-18 x 0.311" HD x 1" long Hi-La S or S- 12 ribbed ribbed bugle screws	6" edge 6" field	Min, No. 20ga. x 3-5/8" x 1-3/8" metal C-Stud	16	162		75
Hardipanel(2, 7) Hardiflex 2, 7) as skirting	5/16	0.113" shank x 0.266" HD x 2" long nail	4" edge 4" field	2 x lumber(4)	24	7.7	143	t, if and lit

The maximum height-to-length ratio for construction in this table is 2:1.

All panel edges must be supported by framing. Hardiflex, and Hardiflex are also permitted to be applied with the long dimension perpendicular to the (1) (2) framing.

<sup>(3)</sup> (4) (5)

training.
All fasteners shall be corrosion-resistant.
Values are for species of wood having a specific gravity of 0.42 or greater.
Values are for species of wood having a specific gravity of 0.36 or greater.
Values are for species of wood having a specific gravity of 0.36 or greater.
Allowable tolerance for shank diameter, head diameter, and length of nail fasteners is as specified in Federal Specification FF-N-1058, Section 3.4.2.
6° ground clearence required for Manufactured Housing Skirting. (6)

<sup>(7)</sup> 

## MANUFACTURER'S RESPONSIBILITIES:

Issuance of this MR commits the manufacturer to fulfill, as a minimum, the following:

- 1. Produce, label and certify the material, product or system in strict accordance with the terms of this MR.
- 2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance or failure reported by HUD.
- 3. When requested, provide the Office of Consumer and Regulatory Affairs, Manufactured Division, HUD Headquarters, with a representative list of properties, in which the material, product or system has been used, including complete addresses or descriptions of locations and dates of installation.
- 4. Inform HUD in advance of changes in production facilities, methods, design of the product, company name, ownership or mailing address.

### **EVALUATION:**

This MR shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of this MR shall apply for a renewal or revision 90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to HUD Headquarters. Appropriate User Fee shall be sent to:

U. S. Department of Housing and Urban Development Technical Suitability of Products Fees P.O. Box 954199 St. Louis, MO 63195-4199

The holder of this MR may apply for revision at any time prior to the Review Date. Minor revisions may be in the form of a supplement to the MR.

If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate User Fee for a revision will need to be submitted in accordance with Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

## **CANCELLATION:**

Failure to apply for a renewal or revision shall constitute a basis for cancellation of this MR. HUD will notify the manufacturer that the MR may be canceled when:

- 1) conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product or system,
- 2) the manufacturer has changed its organizational form without notifying HUD, or
- 3) the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer a written notice, of the specific reasons for cancellation, and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made on a canceled document.